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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,214	06/29/2000	Michael Ben Nun	Q58564	8155

7590 03/19/2004
Sughrue Mion Zinn Macpeak & Seas PLLC
2100 Pennsylvania Avenue NW
Washington, DC 20037-3213

EXAMINER

JAROENCHONWANIT, BUNJOB

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 03/19/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

Office Action Summary

Application No.

09/606,214

Applicant(s)

BEN NUN ET AL.

Examiner

Bunjoo Jaroenchonwanit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-121 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-44, 47, 49-51, 54-73, 76, 78-80, 83-102, 105, 107-109 and 112-121 is/are rejected.
7) ☒ Claim(s) 45, 46, 48, 52, 53, 74, 75, 77, 81, 82, 103, 104, 106, 110 and 111 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been reviewed; the objections and rejections cited are as stated below.

Information Disclosure Statement

2. The specification is objected to because the listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references, incorporated on page 19 and 21 of the specification, have been cited on form PTO-892 by the examiner, they have not been considered.

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of selecting packet processor based on load value; classification packet based on a process flow; determining lowest processing load; load value that represent load categories; generating load value in packet processor; in claims 1-121 must be shown in the drawings or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 35, 64 and 93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 35, 64 and 93 recites the limitation “said unclassified data packets”, “said unclassified data packet classifications”, in line 5, 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-4, 7-8, 13-16, 18-19, 24-27, 29-30, 35-39, 54, 64-68 and 93-97 are rejected under 35 U.S.C. 102(e) as being anticipated by Alles (U.S. 6,466,976).
10. Regarding claims 1, 13, 24, 35, 36, 64, 65, 93, 94, Alles discloses a method of distributing processing loads, comprising: (a) receiving a first packet; (b) determining whether or not any packet processors have been previously selected to process said first packet based on a

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classification of said first packet; (c) when none of said packet processors has been previously designated to process said first packet, selecting a first processor to process said first packet, wherein said first processor is selected based on load values of said packet processors (Col.1, lines 35-43, Col. 2, lines 44-54; Col. 3, lines 14-33).

11. Regarding claims 2, 14, 25, 38-39, 67-68, and 96-97, Alles discloses wherein said classification of said first packet corresponds to a process flow of said first packet Col. 2, lines 44-54).

12. Regarding claims 3, 15 and 26, Alles discloses, selecting said first processor to process all packets corresponding to said process flow of said first packet (Col.8, line 64-Col.9, line 6).

13. Regarding claims 4, 7, 16, 18, 27, 29, 37, 66 and 95, Alles discloses determining which packet processor has a lowest processing load values (selecting processor in weighted round-robin fashion, Col. 3, lines 31-34).

14. Regarding claims 8, 19, 30, 54 Alles discloses, said processing load values are generated in said packet processors and respectively output to said controller (Col. 11, lines 32-37).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. Claims 5, 9-12, 17, 20-23, 28, 31-34, 40-44, 47, 49-51, 55-63, 69-73, 73, 76, 78-80, 83-102, 105, 107, 109, 112-121, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Alles et al., (U.S. 6,466,976) as applied to claims 1, 14 and 29, and further in view of Choquier et al., (U.S. 5,774,668).

17. Regarding claims 5, 17, 28, 40, Alles discloses the invention substantially, as discussed in their base claims, but fails to explicitly disclose each load values represents a processing load category, which ranges from smallest to largest load. However, in an analogous art, Choquier teaches a load-balancing scheme for balancing processors based on processors' load. Choquier categorizes load values into load indices, which range from smallest to largest load (Choquier, Col. 2, lines 43-52; Fig. 7, 8 13). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Choquier with Alles to improve efficiency of balancing processors, with the motivation of attempting to provide an adequate means for allocating processing resources for their client-devices (Col. 1, lines 24-33).

18. Regarding claims 9-12, 20-23, 31-34, 41-44, 47, 49-51, 55-63, as discussed in claim 7, Alles discloses the invention substantially, as claimed, as described in their base claims, including , but does not explicitly detailed, controller determines load values based on a percentage of a total number of tasks. However, in an analogous art, Choquier teaches a load balancing scheme that enables a gateway, e.g., controller, to balance application servers, e.g., processors, by accessing load values of the application servers and the load value is re-evaluated every 30 sec, i.e., the load value is based on the percentage of total number of task (Col. 2, 43-65; Fig. 13). Thus, it would have been obvious to one of ordinary skill in the art at the time of

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the invention was made to incorporate Choquier with Alles to improve efficiency of balancing processors, with the motivation of attempting improve the efficiency of providing an adequate means for allocating processing resources for their client-devices (Col. 1, lines 24-33).

19. Claims 64-73, 76, 78-80, 83-102, 105, 107, 109, 112-121, are program and apparatus claims analogous and corresponding to claims 35-44, 47, 59-51, 54-63, they are rejected by the same rationale, set forth.

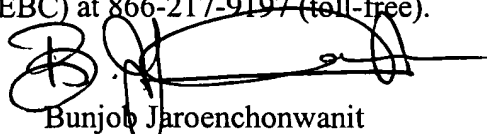
20. Claims 45-46, 48 52-53, 74-75, 77, 81-82, 103, ~~104~~, 106 110-111, are objected to as being dependent upon a rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bunjob Jaroenchonwanit whose telephone number is (703) 305-9673. The examiner can normally be reached on 8:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bunjob Jaroenchonwanit
Primary Examiner
Art Unit 2143

/bj